

**Revisions**

Date	Description	Intls.



Prepared by: *2-3-17*  
**CITY AND BOROUGH OF JUNEAU**  
 ★ **ALASKA'S CAPITAL CITY**  
**ENGINEERING DEPARTMENT**

**MWWTP INFLUENT PUMP STATION  
 TEMPORARY BYPASS**

Contract No. E 17-208

**SITE PLAN  
 PIPING LAYOUT**

DESIGNED BY:	CHECKED BY:	FILE:
DATE: JAN 2017	DRAWN BY:	SCALE: As Shown

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**NOTE 1**

- CUT HOLE THROUGH CMU WALL AND SIDING TO INSTALL PIPING
- 17.5'+ OF 16" IPS SDR 17 HDPE FUSED VERTICAL STANDPIPE FROM GROUND THROUGH CMU WALL - USE FLANGE ADAPTER TO CONNECT TO FLANGED SECTIONS ON CATWALK
- USE FLANGE ADAPTER TO CONNECT TO FLANGE CONNECTION ON GROUND PIPING OUTSIDE BUILDING
- PIPE SHALL BE SECURED TO WALL WITH A MINIMUM OF 3 EQUIDISTANT PIPE CLAMPS SECURED WITH 1/2" DIA HILTI KWIK BOLT 3-316 SS INTO THE CMU WALL.

**NOTE 2**

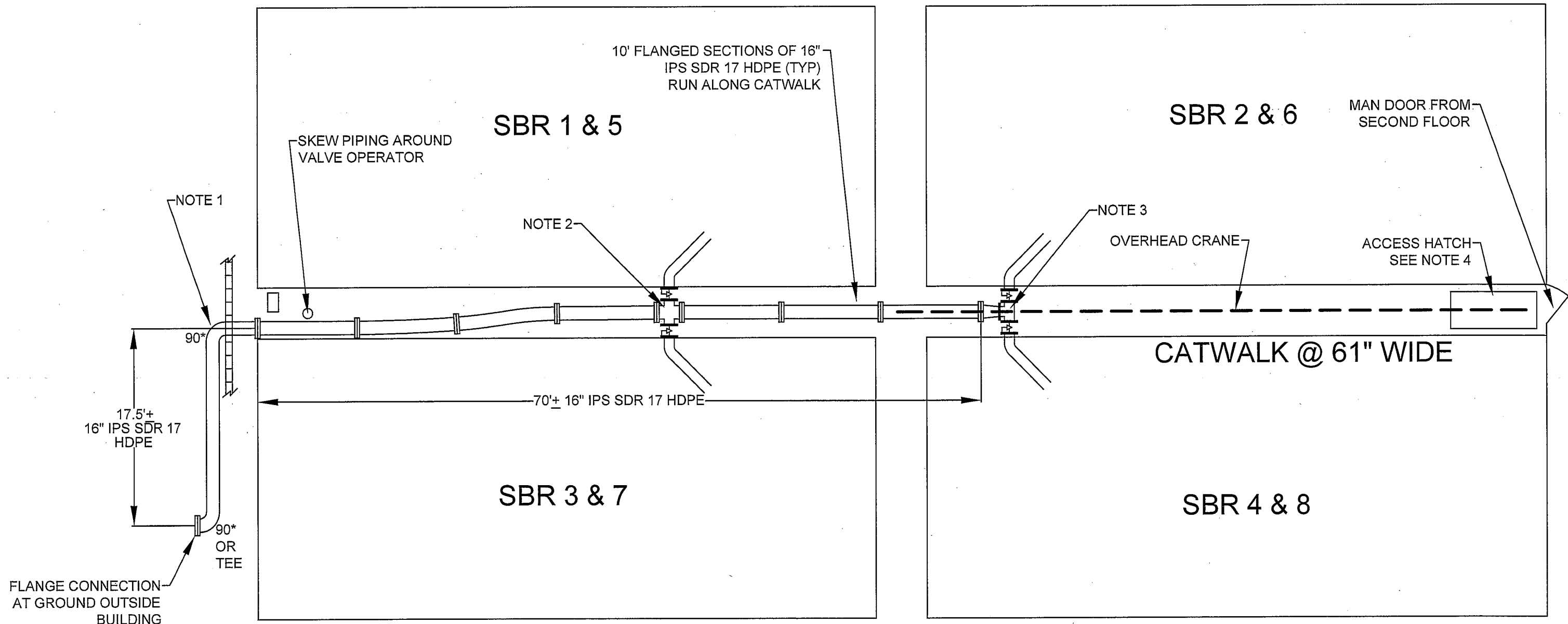
- 16" X 12" DI FLXFL CROSS
- 2 EA 12" FL MILLIKEN PLUG VALVE, 601N1 (1 FOR EACH SBR)
- 12" 45\* DR 17 HDPE BEND FUSED TO FLANGE ADAPTER TO VALVE AND 5' OF 12" IPS DR17 HDPE EXTENDING 45 DEGREES DOWN INTO EACH BASIN

**NOTE 3**

- 16" X 12" FLXFL REDUCER
- 12"X12"X12" DI TEE FLXFL
- 2 EA 12" FL MILLIKEN PLUG VALVE, 601N1, (1 FOR EACH SBR)
- 12" 45\* DR 17 HDPE BEND FUSED TO FLANGE ADAPTER TO VALVE AND 5' OF 12" IPS DR17 HDPE EXTENDING 45 DEGREES DOWN INTO EACH BASIN

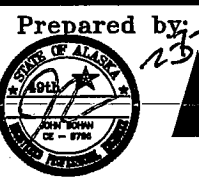
**NOTE 4**

AN OVERHEAD CRANE AND 71-1/2" X 47-1/2" ACCESS HATCH EXTENDS THROUGH TO THE SBR SHOP BELOW FOR LIFTING PIPE, FITTINGS AND VALVES UP TO THE CATWALKS FOR INSTALLATION IN THE SBR ROOMS. THE CAPACITY OF CRANE IS 2 TONS.



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 TEMPORARY BYPASS**

Contract No. E 17-208

**SBR ROOMS INTERIOR  
 PIPING LAYOUT**

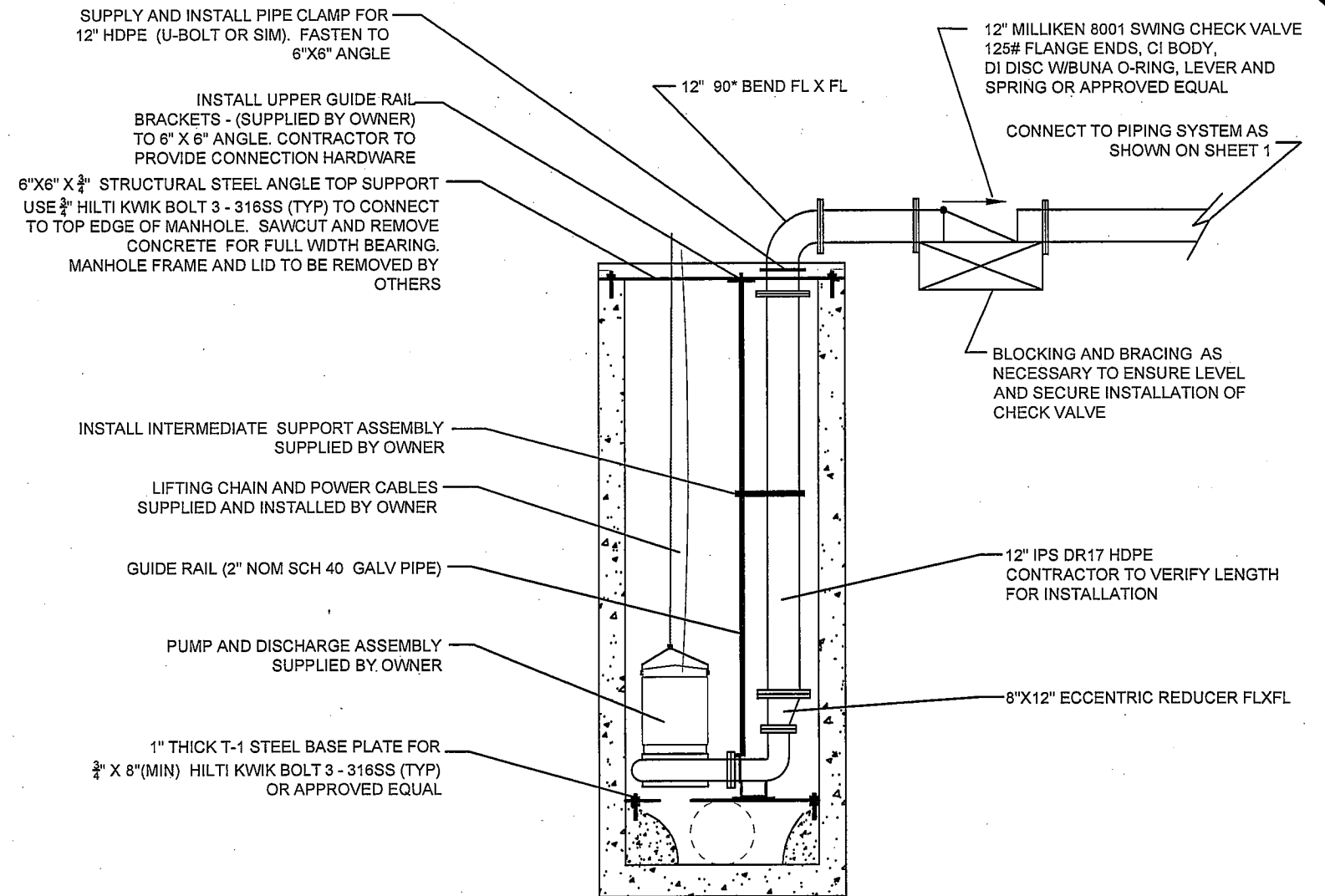
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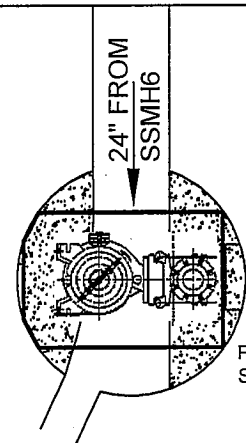
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**PUMP DISCHARGE ASSEMBLY INSTALLATION (FOR EACH MANHOLE)**

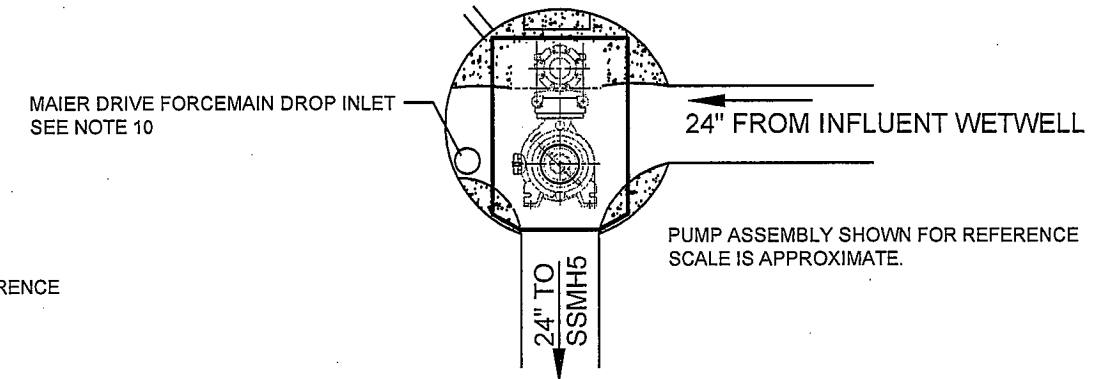
- OWNER WILL REMOVE THE LIDS FROM MANHOLES AND SECURE THE EARTHWORK AROUND THE MANHOLES.
- VERIFY MANHOLE DIMENSIONS FOR INSTALLATION OF STEEL PLATE AND MITER PLATE DIMENSIONS ACCORDINGLY.
- INVESTIGATE AND DETERMINE REQUIRED LENGTH OF HILTI ANCHORS TO PROVIDE FOR INSTALLING THE STEEL PLATE LEVEL IN ALL DIRECTIONS. LEVELING NUTS MAY BE USED PROVIDED THEY LOCK (LOCK NUTS OR DOUBLE NUTS) AND A MINIMUM OF 3" DIAMETER (PR 3" X 3" SQUARE PLATE) 1/2" THICK BEARING WASHER IS USED.
- USE PUMP MANUFACTURER'S INSTALLATION INSTRUCTIONS TO ENSURE PUMP DISCHARGE ELBOW IS INSTALLED AND LOCATED CORRECTLY ON PLATE TO FIT IN MANHOLE AND DRILL BOLT PATTERN TO MATCH MOUNTING HOLES ON DISCHARGE ASSEMBLY. DISCHARGE FLANGE SHALL BE BOLTED DIRECTLY TO STEEL PLATE WITH NO SHIMS OR WASHERS.
- PROVIDE AND INSTALL 8"X12" ECCENTRIC REDUCER ON TO DISCHARGE ELBOW.
- PROVIDE AND INSTALL 6"X6"X3/4" STRUCTURAL STEEL ANGLE IRON ACROSS THE TOP OF THE MANHOLE SECURED WITH 3/4" DIAMETER HILTI ANCHORS. CUT CONCRETE LIP AS NEEDED FOR FULL BEARING ON MANHOLE WALLS. ALIGN TO ENSURE FULL SUPPORT OF DISCHARGE PIPING AND FULL SUPPORT AND FUNCTION OF GUIDE RAILS.
- PROVIDE AND INSTALL 2" NOMINAL DIAMETER SCHEDULE 40 GALVANIZED PIPE FOR GUIDE RAILS AND INSTALLED WITH OWNER PROVIDED INTERMEDIATE SUPPORT AND GUIDE RAIL CAP. GUIDE RAIL CAP WILL BE INSTALLED ONTO THE 6" X 6" X 3/4" STRUCTURAL STEEL ANGLE IRON
- INSTALL 12" PIPING TO DISCHARGE ELBOW, THE 90° BEND AND 12" CHECK VALVE AND CONNECT TO THE PIPING SYSTEM. SECURE DISCHARGE PIPING TO 6"X6" ANGLE WITH PIPE CLAMP (U-BOLT OR SIMILAR).
- PROVIDE BLOCKING AS NECESSARY TO SUPPORT THE 12" CHECK VALVE AND ADJACENT PIPING. THE CHECK VALVE SHALL SIT LEVEL AND SECURE.
- WORK IN SSMH-6 REQUIRES ADVANCE COORDINATION WITH OWNER TO SHUT DOWN MAIER DRIVE PUMP STATION AND TO PREVENT FLOW FROM ENTERING THE MANHOLE FROM UPSTREAM.



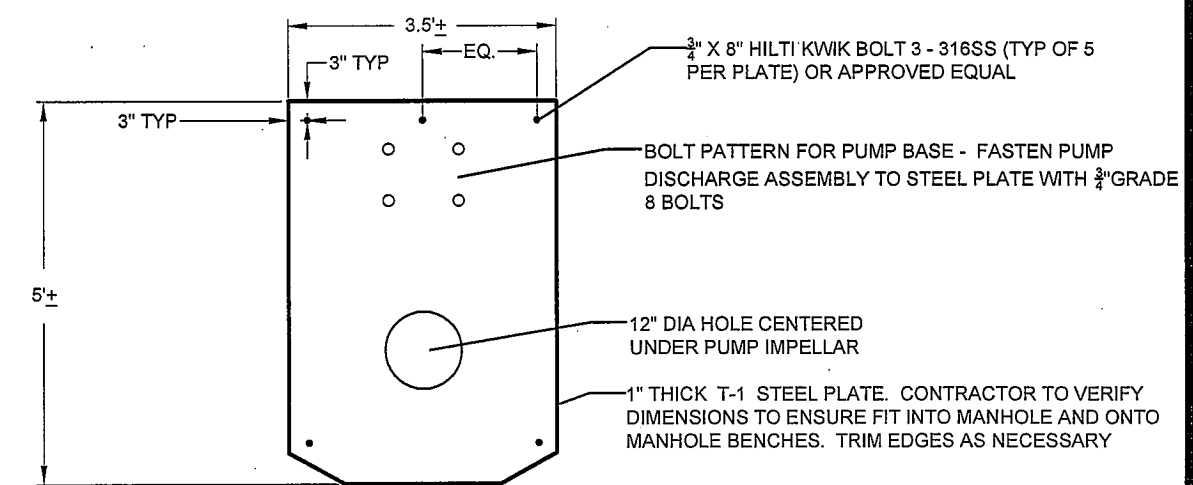
**TYPICAL MANHOLE PUMP INSTALL**  
NTS



**SSMH 5 INVERT DETAIL**  
CONTRACTOR TO VERIFY DIMENSIONS  
NTS



**SSMH 6 INVERT DETAIL**  
CONTRACTOR TO VERIFY DIMENSIONS  
NTS




**TYPICAL PUMP BASE PLATE DETAIL**  
NTS

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**MANHOLE PUMP  
INSTALLATION DETAILS**

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